

PATENT
Docket No.: TW000002
Customer No. 000024737

REMARKS

By this amendment, claim 1 has been amended. Claims 6-12 have previously been cancelled. Claims 1-5 and 13 remain in the application. This application has been carefully considered in connection with the Examiner's Action. Reconsideration and allowance of the application, as amended, is respectfully requested.

Rejection under 35 U.S.C. § 103

Claims 1-3 and 5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Schultz et al ("Multiframe integration via the projective transformation with automated block matching feature point selection") in view of Jasinski et al (USPN 6,504,569), and further in view of Nettles (USPN 5,430,806).

Applicants traverse this rejection on the grounds that these references are defective in establishing a prima facie case of obviousness with respect to claim 1. The Schultz, Jasinski, and Nettles references cannot be applied to reject claim 1 under 35 U.S.C. § 103 in that, when evaluating a claim for determining obviousness, all limitations of the claim must be evaluated. However, since neither Schultz nor Jasinski nor Nettles teaches ... determining, as a function of the first projective transformation parameters, second projective transformation parameters of a projective transformation for application in the non-translated original coordinate systems of the two images, wherein determining the second projective transformation parameters comprises altering the first projective transformation parameters in the translated coordinate system using translation vectors, wherein the translation vectors ensure an equivalence of (i) the projective transformation in the original coordinate systems and (ii) the projective transformation in the translated coordinate system is true ... as is claimed in claim 1, it is impossible to render the subject matter of claim 1 as a whole obvious.

PATENTDocket No.: TW000002
Customer No. 000024737

In contrast, Schultz teaches an automated image registration algorithm based on projective transformation which accounts for camera translation, rotation, zoom, pan and tilt, wherein feature selection is performed by a block matching algorithm and wherein end-points of translation vectors serve as feature point pairs. Shultz further discloses calculating a least squares solution for the projective transformation using only the "best" feature point pairs (Shultz, page 3266, first column, last paragraph; and page 3267, second column, first paragraph).

Jasinschi, on the other hand, teaches extracting 3D data (as opposed to 2D data) from a video sequence. Jansinschi discloses generating a 2D extended image from 3-D data extracted from the video sequence of a 3D scene, that is, from motion parameters and a depth map using a plane perspective projection technique (in contrast to merging a pair of overlapping 2D images into a composite image). In addition, Jansinchi discloses a "preprocessing stage" in which different sets of camera parameters are estimated.

With respect to the preprocessing stage, Jansinschi discloses the need for dividing an image into identical image blocks, so that each block contains the same number of feature points to enforce that the feature points used in the estimation of the camera parameters span the whole extension of the input image I_k , (Jansinschi at Col